**Liquified Petroleum Gas (LPG)  
(A Non-renewable Resource)**

**Advantages and drawbacks**

**The advantages of LPG include:**

* Because LPG vaporizes when released from the tank and is not water soluble, LPG does not pollute underground water sources.
* Power, acceleration, payload and cruise speed are comparable to those of an equivalent vehicle fueled on gasoline. Propane has a high octane rating of 104, in-between Compressed Natural Gas (CNG) (130) and regular unleaded gasoline (87).
* Refueling a propane vehicle is similar to filling a gas grill tank; the time it takes is comparable with that needed to fill a CNG, gasoline or diesel fuel tank.
* Its high octane rating enables it to mix better with air and to burn more completely than does gasoline, generating less carbon. With less carbon buildup, spark plugs often last longer and oil changes are needed less frequently.
* Because it burns in the engine in the gaseous phase, propane results in less corrosion and engine wear than does gasoline.

**The drawbacks of LPG include:**

* In cold conditions, below 32 degrees Fahrenheit, starting could be a problem because of the low vapor pressure of propane at low temperatures.
* One gallon of LPG contains less energy than a gallon of gasoline. The driving range of a propane vehicle is about 14 percent lower than a comparable gasoline-powered vehicle.
* LPG is generally higher priced than other fuel alternatives such as CNG and gasoline.
* There are over 4,000 LPG refueling sites in the US, more than all of the other alternative fuels combined. Most of these stations, however, are not readily available to consumers on a 24/7 basis. This is one of the reasons why most on-road applications are bi-fuel vehicles, which burn LPG and gasoline.

http://www.extraordinaryroadtrip.org/research-library/technology/liqufied-petroleum/ad-draw.asp